REMARKS

The Examiner is thanked for the interview of September 16, 2004. Claims 1 - 28 are pending in the present Application. In the above-identified Office Action, the Examiner objected to the Specification and to Claims 2 - 4, 7, 9, 14, 16, 17, 21 and 23 because of some informalities. Claims 1 - 28 were rejected under 35 U.S.C. §103(a) as being unpatentable over L'Anson et al. in view of "Extensible Markup Language (XML) 1.0" by W3C.

Applicants have amended the Specification to include the Serial Nos. of the Related Applications. Further, Applicants have amended Claims 2 - 4, 7, 9, 14, 16, 17, 21 and 23 to overcome the technical objections made thereto. Further, independent Claims 1, 8, 15 and 22 were amended to better claim the invention. For the reasons stated more fully below, Applicants submit that the claims are allowable over the applied references. Hence, reconsideration, allowance and passage to issue are respectfully requested.

As stated in the SPECIFICATION, most network application programs exchange data using data packets. A packet has a specific structure that incorporates internal fields that clearly delineate the packets' different contents. Using this structural representation, a user may devise algorithms that may be used to effectuate network simulation testing to debug network problems etc. The algorithms may be devised using a markup language, for example. A markup language is a language that allows additional text or tags that are invisible to users to be

inserted into a document. Thus, the tags are not part of the content of the document but rather enhance the document. For example, the tags may be used to structure the document or to add hypertext capability to the document etc.

One of the markup languages that is particularly well suited for this task is the eXtensible Markup Language or XML. XML is a language that is especially designed for Web documents. It allows designers to create their own customized tags, enabling definition, transmission, validation, and interpretation of data between applications and between organizations. The present invention uses an XML document to diagnose network protocol errors.

According to the teachings of the invention, data packets exchanged over a network communications line are captured. The captured packets are used to generate an XML document. The XML document will be malformed if there is a network protocol error and well-formed otherwise. Using the generated XML document, network protocol errors may easily be diagnosed.

The invention is set forth in claims of varying scopes of which Claim 1 is illustrative.

> 1. A method of diagnosing network protocol errors using an eXtensible Markup Language (XML) document comprising the steps of:
>
> capturing data packets exchanged over a network communications line;
>
> ***generating an XML document using the captured data packets, the XML document being malformed if there is at least one network protocol error and well-formed otherwise;*** and

diagnosing the network protocol errors using the XML document. (Emphasis added.)

The Examiner rejected Claims 1 - 28 under 35 U.S.C. §103(a) as being unpatentable over L'Anson et al. in view of "Extensible Markup Language (XML) 1.0" by W3C. Applicants respectfully disagree.

L'Anson et al. purport to disclose a protocol analyzer. According to the teachings of L'Anson et al., the protocol analyzer includes a monitoring device for identifying and receiving protocol data units, a protocol-follower connected to the monitoring device for defining the protocol and an alarm for indicating when the sequence of protocol data units from the monitoring device diverges from the protocol. The protocol analyzer also has a FIFO into which the data units are temporarily stored and a display unit for displaying data units that have violated the protocol. In other words, the protocol analyzer filters out data units that conform to the protocol and displays the ones that violate the protocol. To help with analysis of a protocol violation, data units that preceded an offending data unit may also be displayed. In such a case, the preceded data units are retrieved from the FIFO.

L'Anson et al. further disclose that all data units may be displayed. In order to distinguish non-offensive data units from offensive ones in such a case, L'Anson et al. suggest that distinguishing tags may be attached to the offensive data units so they can be displayed in a distinctive manner.

However, as the examiner accurately stated, L'Anson et al. do not teach, show or so much suggest ***generating an XML document using the captured data packets***. Further, L'Anson et al. do not teach, show or suggest ***diagnosing network protocol errors by using an XML document*** as claimed.

The other applied reference (i.e., Extensible Markup Language (XML) 1.0 by W3C) is nothing but an XML Specification that may be used to produce well-formed XML documents. It does not disclose ***generating an XML document using the captured data packets***. Nor does it disclose ***diagnosing network protocol errors by using an XML document*** as claimed.

Thus, combining the teachings of the two applied references together does not teach, show or suggest the claimed invention.

But more importantly, however, there is no reason to combine the two references together. The Examiner argued that one of the motivations for combining the two references together is the passage in column 8, line 21 of L'Anson et al. where it is stated that offensive data units may be made distinguishable from non-offensive data units. Applicants fail to see why this should be a motivation to combine the teachings of the two references. In that passage, L'Anson et al. specifically advocate the use of tags to make offensive data units distinguishable from non-offensive data units. The XML Specification also discloses the use of tags to make any part of an XML document distinguishable from the rest of the document. Since both references disclose the use of tags for the same purpose,

what then would be the point of combining the two references?

It should nonetheless be noted that the algorithm used by the invention ensures that communication errors will result into a **malformed** XML document (see page 17, line 28 to page 21, line 14 of the Application). This is what allows for the diagnosis of communication errors using the generated XML document. By contrast, the combination of the teachings of L'Anson et al. with the XML Specification will presumably always produce a **well-formed** XML document. Thus, Applicants submit that the combined teachings of the two references would not help anymore with the diagnosis of communication errors than the lone teachings of L'Anson et al.

Consequently, Claim 1, as well as its dependent claims, should be allowable. Independent Claims 8, 15 and 22, which all incorporate the above-emboldened-italicized limitations in the above-reproduced claim 1, together with their dependent claims should also be allowable. Hence, Applicants once more respectfully request reconsideration, allowance and passage to issue of the claims in the application.

Respectfully submitted,
Banerjee et al.

By: _____
Volel Emile
Attorney for Applicants
Registration No. 39,969
(512) 306-7969